UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Eramet Marietta Inc.	)	**NOTICE and FINDING OF**
Marietta, OH	)	**VIOLATION**
	)	
Proceedings Pursuant to	)	**EPA-5-22-OH-03**
the Clean Air Act,	)	
42 U.S.C. §§ 7401 *et seq.*	)	
	)	

NOTICE and FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Eramet Marietta Inc. (Eramet or you) is violating Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412, and the Ohio State Implementation Plan (SIP). Specifically, Eramet is violating the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Ferroalloys Production: Ferromanganese and Silicomanganese at 40 C.F.R. Part 63, Subpart XXX (Subpart XXX), and the Ohio SIP as follows:

Statutory and Regulatory Background

1. Section 112 of the CAA, 42 U.S.C. § 7412, requires EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAPs) and establish emissions standards for the categories and subcategories. These emission standards are known as the NESHAP. EPA codified these standards at 40 C.F.R. Parts 61 and 63.

2. "Major Source" is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence. See 42 U.S.C. § 7412(a)(1) and 40 C.F.R. § 63.2.

3. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3) and 40 C.F.R. § 63.2.

4. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the CAA. 42 U.S.C. § 7412(a)(6) and 40 C.F.R. § 63.2.

5. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), on May 20, 1999, EPA promulgated Subpart XXX, 40 C.F.R. § 63.1620-1679. *See* 64 Fed. Reg. 27450.

6. EPA revised Subpart XXX several times, most recently on June 30, 2015. *See* 80 FR 37390.

7. Subpart XXX applies to ferromanganese and/or silicomanganese production facilities that are a major source or are co-located at a major source of hazardous air pollutant emissions. *See* 40 C.F.R. § 63.1620(a).

8. Subpart XXX also applies to facilities that operate electric arc furnace(s), casting operation(s), metal oxygen refining (MOR) process(es), crushing and screening operations, and/or outdoor fugitive dust sources. *See* 40 C.F.R. § 63.1620(b).

9. Subpart XXX at 40 C.F.R. § 63.1622 defines process fugitive emissions source as a source of HAP emissions that is associated with a ferromanganese or silicomanganese production facility and is not a fugitive dust source or a stack emissions source. Process fugitive sources include emissions that escape capture from the electric arc furnace, tapping operations, casting operations, ladle treatment, MOR, or crushing and screening equipment.

10. Subpart XXX at 40 C.F.R. § 63.1623(b)(3)(ii) provides that an individual opacity reading shall be determined as the average of 24 consecutive images recorded at 15-second intervals with the opacity values from each individual digital image rounded to the nearest 5 percent.

11. Subpart XXX at 40 C.F.R. § 63.1623(b)(3)(iv) prohibits the average of any two consecutive individual opacity readings be greater than 20 percent opacity during operation.

12. Subpart XXX at 40 C.F.R. § 63.1623(a) requires the owner and operator of ferromanganese and/or silicomanganese production facilities to install, operate, and maintain an effective capture system that collects the emissions from each electric arc furnace operation and conveys the collected emissions to a control device for the removal of the pollutants specified in the emissions standards.

13. Subpart XXX at 40 C.F.R. § 63.1623(b) requires, among other things, that the owner or operator of an affected facility must install, operate and maintain a capture system that is designed to collect 95 percent or more of the emissions from process fugitive sources and convey the collected emissions to a control device that is demonstrated to meet the applicable emission limit specified in paragraph (a)(1).

14. Subpart XXX at 40 C.F.R. § 63.1623(f) requires that, at all times, the owner or operator of an affected facility must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

15. Subpart XXX at 40 C.F.R. § 63.1622 defines process fugitive emissions source as a source of HAP emissions that is associated with a ferromanganese or silicomanganese production facility and is not a fugitive dust source or a stack emissions source. Process fugitive sources include emissions that escape capture from the electric arc furnace, tapping operations, casting operations, ladle treatment, MOR or crushing and screening equipment.

Ohio State Implementation Plan

16. Under Section 110(a)(2) of the CAA, 42 U.S.C. § 7410(a)(2), each SIP must include enforceable emissions limitations and other control measures, means, or techniques, as well as a schedule for compliance, as may be necessary to meet applicable requirements, and must include a permit program to provide for the enforcement of these limitations, measures, and schedule as necessary

to assure the NAAQS are achieved. Upon EPA's approval of a SIP, it become independently enforceable by the federal government, as stated under Section 113(a)(l) of the CAA, 42 U.S.C. § 7413(a)(l).

17. EPA has approved various provisions of the Ohio Administrative Code (Ohio Admin. Code) as part of the Ohio SIP, including Ohio Admin. Code § 3745-17-07. 84 FR 24034 (May 24, 2019).

18. The Ohio SIP at Ohio Admin. Code § 3745-17-07(A)(1)(a) sets visible particulate emission limitations for stack emissions, except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3), such that visible particulate emissions from any stack shall not exceed twenty percent opacity as a six-minute average.

Factual Background

19. Eramet owns and operates a ferromanganese and silicomanganese production facility (the Facility) in Marietta, Ohio.

20. On March 11, 2019, the Ohio Environmental Protection Agency (OEPA) issued a permit to Eramet, pursuant to Title of the CAA, 42 U.S. C. §§ 7661-7661f. This permit, P0091078, states that the Facility is a major source of HAPs and subject to Subpart XXX.

21. Eramet owns and operates the following equipment at the Facility: Electric arc furnace(s), casting operation(s), Metal Oxygen Refining (MOR) process, crushing and screening operations, and outdoor fugitive dust sources.

22. At all times relevant to this NOV/FOV, Eramet was and is a major source of HAPs, as defined in 42 U.S.C. § 7412(a)(1) and 40 C.F.R. § 63.2.

23. Eramet was and is a "person," as that term is defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

24. Eramet was and is an "owner" and an "operator" as those terms are defined in Section 112 of the CAA, 42 U.S.C. § 7412.

25. At the Facility, Eramet operates a number of emission sources including, but not limited to:

a. Plant wide roadways and parking areas;

b. Storage piles;

c. The MOR process;

d. Two submerged arc furnaces, P901 (#1 Furnace in C1F) and P908 (#12 Furnace in C2F); and

e. Crushing, sizing, and packing system.

26. From August 17th through August 19th, 2021, EPA inspected the Facility (the Inspection). The Inspection included an onsite tour and offsite visible emission observations of the opacity from roof monitors.

27. During the August 17, 2021, Inspection, EPA observed visible emissions from the #12 Furnace roof monitor. Visible emissions on August 17, 2021, were analyzed in accordance with EPA Alternative Method 082. The opacity measured was 63%, 64%, and 69% (6-minute average).

28. EPA requested documents on the Inspection including, but not limited to:

a. Facility layout;

b. Monthly visible emission readings for each furnace and MOR for the last six months;

c. The previous four quarters of deviation reports;

d. Description/documentation of upgrades to emission capture and control equipment for Subpart XXX; and

e. Action Plan for Furnace #12 scrubber.

29. On August 20, 2021, Eramet submitted the requested documents from the Inspection. Eramet submitted, among other things:

a. "C2F Low Cost Upgrades Basic Engineering Report" Document Number 11806-4-06-2-23 dated July 3, 2018; and,

b. Deviation reports for the periods of:

i. Quarterly report from July 1, 2020 to September 30, 2020;

ii. Quarterly report from October 1, 2020 to December 31, 2020;

iii. Semiannual report from July 1, 2020 to December 31, 2020;

iv. Quarterly report from January, 2021 to March 31, 2021;

v. Quarterly report from April 1, 2021 to June 30, 2021; and

vi. Semiannual report from January 1, 2021 to June 30, 2021.

30. The "C2F Low Cost Upgrades Basic Engineering Report" Document Number 11806-4-06-2-23 states in part that the C2F upgrades at the Eramet plant were intended to capture 77% emissions from the C2F Tapping area, 18% emissions from the C2F Slag Raking area, and 60% emissions from the C2F Casting area.

31. Table 1, below, identifies periods of time between November 20, 2020, and June 26, 2021 when the air pollution control device was bypassed or "overwhelmed" at the #1 and #12 Furnaces, releasing excess and uncontrolled emissions into the atmosphere. The periods of time and descriptions in Table 1 are based on the reports listed in Paragraph 29.b.

Table 1: Bypassing Air Pollution Control Devices from November 20, 2020 to June 26, 2021

Date	Start Time	End Time	Furnace	Description
6/26/2021	11:59 AM	12:00 PM	#1	High exhaust temperatures caused the bypass stack on the baghouse to open.
6/21/2021	1:00 PM	1:02 PM	#1	High exhaust temperatures caused the bypass stack on the baghouse to open.
5/17/2021	8:29 AM	8:30 AM	#12	High exhaust temperatures caused heavy amount of visible emissions at the scrubber stack and furnace roof.
5/17/2021	11:26 AM	11:28 AM	#1	High exhaust temperatures caused the bypass stack on the baghouse to open.
4/28/2021	6:03 PM	6:18 PM	#12	Emissions vented to atmosphere bypassing the scrubber.
12/23/2020	11:54 AM	11:56 AM	#1	High exhaust temperatures caused the bypass stack on the baghouse to open.
11/20/2020	8:30 AM	8:31 AM	#1	High exhaust temperatures caused the bypass stack on the baghouse to open.

Violations

32. On August 17, 2021, visible emission observations from the #12 Furnace roof monitor exceeded 20% as a 6-minute average for two consecutive 6-minute periods (64% and 69% as a 6-minute average), in violation of Subpart XXX at 40 C.F.R. § 63.1623(b)(3)(iv).

33. On August 17, 2021, visible emission observations from the #12 Furnace roof monitor exceeded 20% as a 6-minute average (63%, 64%, and 69% as a 6-minute average) in violation of the Ohio SIP at Ohio Admin. Code § 3745-17-07(A)(1)(a).

34. The process fugitive emission capture system for the #12 Furnace is designed to achieve less than 95% capture from tapping, slag raking, and casting, in violation of Subpart XXX at 40 C.F.R. § 63.1623(b).

35. Bypassing the air pollution control device for the #1 Furnace and not using effective capture for the #12 Furnace, outlined in Table 1 above, are violations of Subpart XXX at 40 C.F.R. §§ 63.1623(a) and 63.1623(f).

Environmental Impact of Violations

36. These violations have caused excess emissions of particulate matter. Particulate matter, especially fine particulates, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing, and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

The particulate matter emitted from certain integrated iron and steel operations contains manganese. Manganese is a neurotoxin at certain concentrations that can cause neuromotor and neuropsychological deficits. Inhaled manganese may be transported to the brain before it is metabolized by the liver. Exposure to elevated concentrations of manganese in the air may lead to a permanent neurological disorder known as manganism, the symptoms of which include tremors, difficulty walking, facial muscle spasms, negative cognitive effects, and mood changes. It may also lead to lung inflammation and impaired lung function. In children, exposure to elevated levels of manganese may result in effects on brain development, including changes in behavior and decreases in learning and memory capacities.

MICHAEL HARRIS

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